


October 19, 2021 Bayer Dicamba Meeting: Updated Proposal


Marrieta shared with Bayer that we presented bayer proposal to michal and that she was not overly impressed. Going to review 6a2 then circle back to update michal in the next week or two. Will share this updated proposal as well.







Reflections on the 2021 Growing Season

- // The vast majority of XtendiMax and other low volatility dicamba formulation applications in 2021 provided key weed control benefits and did not lead to OTM inquiries
- // Support for XtendiMax has been widespread and overwhelmingly positive this year
 - // Many growers and/or state officials have emphasized its importance for weed control, including in letters provided to EPA from stakeholders in AL, GA, IA, LA, MO, MN, MS, NC, ND, NE, NY, OH, SD, TN, TX
- // Soybean yields appear to be on track for record highs, despite serious early season drought
 - // For example, in Iowa, which reported the highest number of complaints in the Midwest, "soybean growers are projected to average 61 bushels per acre, the highest yield in nearly a century of records," according to the Des Moines Register

Screen Capture



BAYER 2021 inquiry data indicates continued and significant reduction in off-target movement (OTM) issues nationwide.

 <h4>Inquiries continue to decrease</h4> <ul style="list-style-type: none">// Continued dramatic downward trend of OTM inquiries since 2017// Inquiries represent a tiny portion of national use	 <h4>Inquiries are related to later applications</h4> <ul style="list-style-type: none">// Visual symptoms appear up to 2 weeks after exposure// Inquiries are largely in relation to late June applications
 <h4>Inquiries are localized</h4> <ul style="list-style-type: none">// OTM inquiries largely concentrated in certain Midwest States// Inquiries decreased and remained low in most other states	 <h4>Inquiries are tied to other sources</h4> <ul style="list-style-type: none">// OTM from applications on corn played important role// Drought and other chemicals can be mistaken for dicamba symptomology

These conclusions based on Bayer OTM inquiry data are consistent with findings and data from state extension, state officials, growers, and other experts.

Screen Capture



Bayer's proposal responds to concerns about OTM reports by altering the application timing in certain states and in other ways.

Bayer's 2021 XtendiMax Proposal: [Overview](#)

// To address the findings regarding localized inquiries, which are significantly influenced by late applications and other sources like applications over corn, Bayer's 2021 XtendiMax proposal focuses on:

- (1) northern Midwest states by regional label amendments requiring earlier and fewer applications in soy,
- (2) southern states by aligning soybean applications to the cotton date through regional label amendment, and
- (3) dicamba applied to corn through a stewardship and education approach.

// In crafting the proposal, Bayer has also taken into account the fact that dicamba symptomology is generally observed 7 to 14 days after low dose exposure (Werle, et al., 2018, Soybean injury from dicamba (A4161))

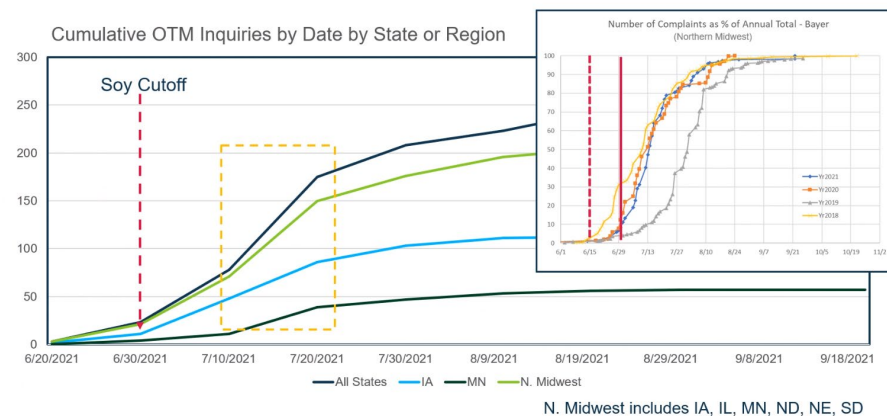
Steven Callan

Proposal seeks to address localized issues and applications from corn. Limiting to 1 post emergent application.



On average, ~99% of OTM inquiries received by Bayer from northern Midwest states have come after June 15.

With symptomology 7-14 days after application, most inquiries are received after later applications.



In Northern midwest region, we see most incidents a couple weeks after that soybean cut off.



OTM of higher volatility dicamba from applications on corn have contributed to OTM inquiries received in 2021 as in previous years.



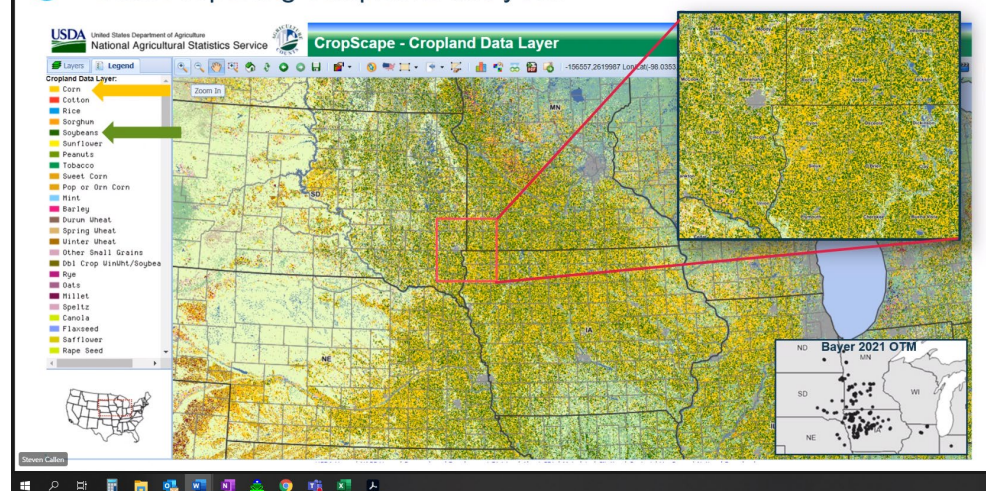
<https://www.news.iastate.edu/media/2019/10/V687.jpg>

- // IA: **100%** of inquiry fields had at least one nearby corn field, *i.e.*, within 240 feet
 - // On average, there would be slightly over **3** corn fields
- // MN: **74%** of inquiry fields had at least one nearby corn field, *i.e.*, within 240 feet
 - // On average, there would be **3** corn fields

Soybeans are surrounded by corn fields



Corn and soybean are widely interspersed in the northern Midwest States reporting complaints this year.



EPA: These areas you zoomed in on with areas of higher complaints, have you looked into areas with higher DT areas. Have you looked into if areas with higher adoption and potential landscape loading.

Bayer: Most of these reports are coming from enlist soybean. We don't know where a seed is planted, but only know where seed is sold. The northwest area is a good mix of enlist and xtend. It's pretty even across Iowa with Bayer having 50% market share and assuming its even split cross other companies for other 50%.



Bayer's proposal responds to concerns about OTM reports by altering the application timing in certain states and in other ways.

2021 XtendiMax Proposal: [Overview](#)

// Bayer has consulted with state officials in preparing this proposal

// In multiple Northern Midwest states for which further restrictions are proposed, officials* from the Departments of Agriculture told us they prefer a June 20 application deadline

// Bayer's proposal is more restrictive in multiple respects

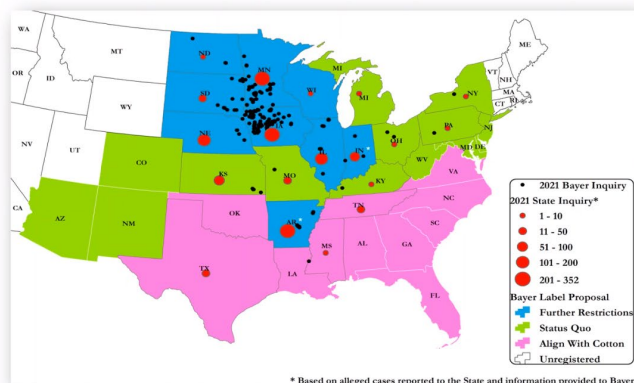
// In many other states, officials either preferred no change or sought fewer restrictions on dicamba use

*Commissioners/Secretaries of Ag



Both State and Bayer inquiry data show label is successful in the majority of States, especially in the South.

2021 XtendiMax Proposal: [Overview](#)



// Proposal:

- (1) state-by-state/regional label for soybean
- (2) dicamba on corn education/stewardship

Map showing their inquiries and state inquiries

2021 XtendiMax Proposal: Soybean applications



3 Southern States

- // Align cutoff date with that for cotton (July 30)
- // Potential for 24c use to reduce restrictions

Growth stage restriction helps to promote earlier and more spread out dicamba applications on soybean.

- // % of crop at V4 by end of week 23:
- | | | |
|---------|---------|---------|
| IA: 31% | IL: 29% | IN: 24% |
| MN: 35% | ND: 21% | NE: 32% |
| SD: 22% | WI: 17% | |

** Data from USDA NASS planting progress data; based on soybean reaching V4 growth stage four weeks from planting

Bayer: The grower knows when their crop is at V4 and when they should not apply. Officials would be able to assess what stage the soybeans are at in the field. Tavium has a growth stage cut off, though it is due to metolachlor. This would be part of the broad training elements and this aligns with other pesticides.



Proposal promotes earlier/fewer applications in region with highest number of OTM inquiries and addresses corn applications

2021 XtendiMax Proposal: **Corn applications**

- // Bayer will add recommendations to dicamba training deck, engage VRA/dicamba retailers, and make other efforts
- // Dicamba was applied post-emergent on 14 million corn acres in 2020 in the US
- // Dicamba applied on corn and on other non-DT crops is more prone to drift and volatilization and is not restricted use

Bayer Recommendations For Corn		
VRA (for every application)	DRA (for all glyphosate tank mixes)	Apply Early
Do Not Spray (downwind sensitive crops)	XC/UC (larger droplets to reduce drift)	Do Not Spray (during temperature inversion)
Deactivators	Triple Rinse	No AMS

Steven Callen



In addition to this XtendiMax proposal, Bayer will help applicators in IA, IL, and MN through additional stewardship efforts in 2022.

Additional Bayer Dicamba Stewardship Efforts for 2022

- // Bayer and academics have conducted spray drift and plant effect field studies at 17 locations using hooded sprayers in 2021
- // Preliminary data shows hooded sprayers are highly effective at further reducing dicamba OTM



2022 Stewardship Efforts	Acre Opportunity <i>*Assumed 4.4k – 10k per sprayer</i>
External Collaboration	2.2M – 5M acres
Hooded Sprayer Trials	900k – 3.5M acres
TOTAL	3.1M – 8.5M acres

Other Considerations:

- // Stewardship in corn at State level
- // VRA / DRA mandates in corn across industry for ALL dicamba

Steven Callen

Will submit regulatory studies by end of year and academic studies are getting close to completion.

Sponsoring hooded sprayers and doing cost sharing for the 2022 field season



Proposal promotes earlier/fewer applications in region with highest number of OTM inquiries and addresses corn applications

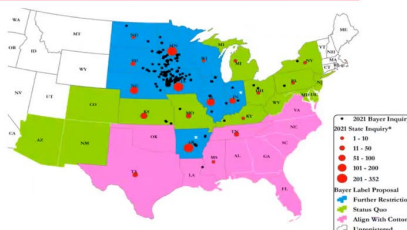
2021 XtendiMax Proposal Summary

Bayer's 2021 XtendiMax proposal addresses:

- (1) northern Midwest states by regional label amendments requiring earlier and fewer applications in soy,
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// Proposal:

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EPA: What 24Cs would you expect?

Bayer: GA expansion for cotton and with layby sprayers. Adding options for replant. TX: differences between high plains and costal regions.

EPA: Not obvious what the rationale is for which states go in which category from a scientific rationale.

Bayer: we can discuss Arkansas. From Missouri and Kansas we have heard they are satisfied with the label as is and don't want to be lumped into northern states. They are comfortable with the incident numbers they're receiving. The regions also based on when the complaints came in.

EPA: Can't base the restrictions based exclusively on what the states want. If there is analysis that supports it, then that's what we need to consider.

Bayer: A lot of these states aren't out in the field yet and they're just receiving formation

EPA: What can the agency expect from the hooded sprayer trials? The most recent package from 6a2 includes correspondence, so what would we expect in the 25 correspondence documents?

Bayer: Hooded sprayer trials around cotton based on feedback from agency last year – plant effects from downwind soybean fields and field drift trials. Preliminary data shows that the buffer would be less than 3 meters and in some cases up to 10 meters. Being sprayed on crop and used multiple sprayers. Communications contains articles, photos, cover dealers and retailers emailing representatives with information. Names and emails are redacted to protect their identity when outside Bayer community.

EPA: Blue areas would move to June 15. What would you think about cotton cut off since there is cotton grown in some of those areas.

Bayer: We would keep cotton consistent with the current label. Any information about process and where we're at?

EPA: Unfortunately, we do not have additional feedback at this time. End of October doesn't seem feasible but we are driven by seed purchase information and are mindful of the uncertainty around that.

EPA needs to regroup and discuss proposal before we can provide feedback to Bayer. Slides were provided to EPA and there is additional summary information within the slidedeck.